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EDMUND G. BROWN, JR.  
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AFL 14-17

**TO:** All Health Facilities

**SUBJECT:** Middle East Respiratory Syndrome Coronavirus - Updated Health Alert  
Supersedes AFL 13-23

As of May 29, 2014, 636 laboratory-confirmed Middle East Respiratory Syndrome Coronavirus (MERS-CoV) cases have been reported to the World Health Organization (WHO). Nine countries in the Arabian Peninsula have confirmed MERS-CoV cases, and ten countries, including the United States, have confirmed traveler-associated cases. All of the traveler-associated cases had either traveled to an Arabian Peninsula country or had contact with someone infected with MERS-CoV. Nearly 20 percent of reported cases involve healthcare workers who were likely exposed while working in hospitals in affected countries; 10 of the healthcare workers have died. Some infected healthcare workers who were screened after exposure have been asymptomatic. All infected persons have been adults and most have had co-morbidities. Their symptoms included fever, cough, diarrhea, and shortness of breath. Most of the affected patients have become severely ill, and 30 percent have died.

The number of laboratory-confirmed MERS-CoV cases reported to the WHO has sharply increased since mid-March 2014, particularly in Saudi Arabia and the United Arab Emirates, where important healthcare-associated outbreaks are occurring. In May 2014, the first two cases of MERS-CoV were identified in the United States. Both cases involved healthcare workers who had been working in Saudi Arabia prior to their travel to the United States. Both cases were hospitalized prior to suspicion of MERS-CoV infection, and many healthcare workers were exposed while caring for these patients without the use of appropriate personal protective equipment. No healthcare workers have been infected in the United States.

While there has been no evidence of sustained person-to-person transmission of MERS-CoV, limited person-to-person transmission has been documented in healthcare settings. With the ease of international travel and the potential for this virus to be transmitted in healthcare settings, the California Department of Public Health (CDPH) is strongly encouraging healthcare facilities to:

- Review their preparedness plans, including their respiratory protection program and Aerosol Transmissible Diseases (ATD) exposure control plans (required by Title 8

California Code of Regulations Section 5199);

- Take steps to ensure that persons presenting with severe acute respiratory illness are evaluated for history of recent travel, including in the emergency department, prior to being seated in a waiting room;
- Implement appropriate infection control measures for suspected cases of MERS-CoV infection; and
- Immediately report suspected MERS-CoV cases to their local health departments.

### **Patients Who Should be Evaluated for MERS-CoV Infection**

The Centers for Disease Control and Prevention (CDC) is recommending surveillance and testing<sup>1</sup> for persons who have unexplained severe respiratory illness and a history of travel to countries in the Arabian Peninsula<sup>2</sup> or neighboring countries. In particular, persons who meet the following criteria should be reported and evaluated:

Fever ( $\geq 38^{\circ}\text{C}$ ,  $100.4^{\circ}\text{F}$ ) and pneumonia or acute respiratory distress syndrome (based on clinical or radiological evidence); AND

- a history of travel from countries in or near the Arabian Peninsula within 14 days before symptom onset; OR
- close contact<sup>3</sup> with a symptomatic traveler who developed fever and acute respiratory illness (not necessarily pneumonia) within 14 days after traveling from countries in or near the Arabian Peninsula; OR
- a member of a cluster of patients with severe acute respiratory illness (e.g. fever and pneumonia requiring hospitalization) of unknown etiology in which MERS-CoV is being evaluated, in consultation with state and local health departments.

OR

Close contact with a confirmed or probable case of MERS-CoV while the person was ill; AND

- fever ( $>100^{\circ}\text{F}$ ) or symptoms of respiratory illness within 14 days following the close contact.

### **Infection Control Guidance for MERS-CoV Infection**

The CDC recommends that Airborne and Contact Precautions, in addition to Standard Precautions (including eye protection), be applied when caring for patients with confirmed or suspected MERS-CoV infection.

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<sup>1</sup> While patients with lower respiratory illness should also be evaluated for common causes of community-acquired pneumonia, positive results for another respiratory pathogen (e.g., influenza) should NOT necessarily preclude testing for MERS-CoV because co-infection can occur. For these patients, testing for MERS-CoV and other respiratory pathogens can be done simultaneously.

<sup>2</sup> Countries considered in the Arabian Peninsula and neighboring include: Bahrain; Iraq; Iran; Israel, the West Bank, and Gaza; Jordan; Kuwait; Lebanon; Oman; Qatar; Saudi Arabia; Syria; the United Arab Emirates (UAE); and Yemen.

<sup>3</sup> Close contact is defined as: a) any person who provided care for the patient, including a healthcare worker or family member, or had similarly close physical contact; or b) any person who stayed at the same place (e.g. lived with, visited) as the patient while the patient was ill.

CDC infection control guidance for MERS-CoV is available at:

<http://www.cdc.gov/coronavirus/mers/infection-prevention-control.html>.

Additionally, as employers, facilities are required to follow the requirements of the California Occupational Safety Health Administration's (Cal/OSHA) ATD Standard, Title 8 of the California Code of Regulations (CCR) Section 5199. The Standard requires that healthcare facilities follow CDC recommendations regarding the use of airborne infection precautions for novel viruses and can be found at:

<http://www.dir.ca.gov/title8/5199.html>

### **Laboratory Biosafety for MERS-CoV**

Unlike severe acute respiratory syndrome (SARS), MERS-CoV appears to be isolated and propagated 'relatively easily' in viral tissue cultures. Therefore, the CDC advises that **viral isolation not be performed on specimens** from suspected MERS-CoV cases (unless it is performed in a Biosafety Level-3 facility). Please see CDC laboratory guidance for the collection, handling, processing and transport of specimens from suspected novel coronavirus patients at:

<http://www.cdc.gov/coronavirus/mers/guidelines-clinical-specimens.html>

Laboratories are also required to follow recommendations under the laboratory section of Cal/OSHA ATD Standard, Title 8 CCR Section 5199, found under subsection (f) at:

<http://www.dir.ca.gov/title8/5199.html>

Please notify your local health department immediately if a patient is suspected to be infected with MERS-CoV. If appropriate, your local health department will work closely with the CDPH Viral and Rickettsial Disease Laboratory (VRDL) and the CDC to coordinate testing. VRDL specimen submitted forms are available at:

<http://www.cdph.ca.gov/programs/vrdl/Documents/Influenza%20and%20Respiratory-%20Individual%20Specimen%20Submittal%20Form%201002213.pdf>

If you have any questions regarding the infection prevention and control of MERS-CoV, please contact the CDPH Healthcare-Associated Infections (HAI) Program at 510-412-6060, or [infectioncontrol@cdph.ca.gov](mailto:infectioncontrol@cdph.ca.gov) .

Sincerely,

**Original signed by Jean Iacino**

Jean Iacino  
Interim Deputy Director  
Center for Health Care Quality

Attachment: "MERS Poster"



# **Alert: Middle Eastern Respiratory Syndrome (MERS)**

MERS is a respiratory disease that has infected persons in countries in and near the Arabian Peninsula. There have been several outbreaks of this illness due to spread from ill persons to healthcare workers and patients in healthcare settings. Here's what to look for.

## **If you recently traveled to:**

- Bahrain
- Iraq
- Iran
- Israel
- Jordan
- Kuwait
- Lebanon
- Oman
- Palestinian territories
- Qatar
- Saudi Arabia
- Syria
- United Arab Emirates (UAE)
- Yemen

## **OR had close physical contact in the last 14 days with someone who may have MERS:**

Such as

- Provided care for,
- Lived with, or
- Visited a sick person as described below.

## **And became ill within 14 days of return with:**

- ✓ Fever AND
- ✓ Cough or trouble breathing



# **Let staff know IMMEDIATELY.**